

Abstract

An object of the invention is to provide wideband modulator using a PLL synthesizer which can match the frequency characteristic and prevent degradation in modulation accuracy even in the presence of a variation in the manufacture of circuit components.

In a wideband modulator which modulates the division ratio of a frequency divider by using a modulating signal generated by a modulating signal generator and outputs a modulated carrier signal from a VCO, first and second calibration data from a calibration data generator are input via a selector. The amplitude value of an ac component of each modulating signal appearing on the output of a loop filter or the amplitude value of an ac component of each modulating signal demodulated by a demodulator is converted to a digital value by way of an A/D converter. The difference between the two is detected by error detection means and a control signal FCR to eliminate the difference is generated by frequency characteristic correction means in order to correct the frequency characteristic of a PLL or a pre-distortion filter.